

death, or a minimum of 3 months. We estimated serum 25-OH vitamin D and IL-1 $\beta$  in the CSF by ELISA on pre-treatment specimens. We defined poor outcome as death or severe neurological sequelae (modified Rankin score of 3–6). Outcome was independently scored by two investigators before estimating vitamin D and IL-1 $\beta$  levels.

**Results:** Mean age of the patients was  $38 \pm 13$  years; 28 (70%) were men. Median (IQR) duration of symptoms was 20 (14–34) days. Twenty-two (55%) patients had grade 3, 12 (30%) had grade 2, and the remaining 6 (15%) had grade 1 TB meningitis. On follow-up, 21 patients had a poor outcome – 15 patients died; and 6 of the 25 survivors had severe neurological sequelae. Lower Glasgow coma score (9 [7–10] vs. 12 [10–15];  $P=0.007$ ) was significantly associated with poor outcome. Twenty-two (55%) patients had deficient ( $<20$  ng/mL;  $n=10$ ) or insufficient (20–30 ng/mL;  $n=12$ ) serum vitamin D levels. But, serum vitamin D level was not associated with clinical outcome (good vs. poor outcome:  $28.30 \pm 14.96$  vs.  $35.92 \pm 17.11$  ng/mL;  $P=0.141$ ). Further, serum vitamin D level did not correlate with CSF IL-1 $\beta$  level (Spearman's  $\rho=0.083$ ;  $P=0.609$ ).

**Conclusion:** Vitamin D deficiency/insufficiency is common among adults with TB meningitis. But, the low vitamin D levels are not associated with IL-1 $\beta$ , a marker of CNS inflammation, and clinical outcome. Hence, vitamin D supplementation may not be useful as an adjunctive treatment in TB meningitis.

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### The acceptability and feasibility of chemical prophylaxis for schoolchildren and adolescents with latent tuberculosis infection in Shanghai, China: A qualitative study

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**Background:** China has the 2<sup>nd</sup> highest burden of tuberculosis (TB). More about 40–45% of population were infected with TB and most of them were latent tuberculosis infection (LTBI). However, with better socioeconomic status, the prevalence of LTBI in Shanghai is relatively lower, especially among children. The contact history with TB patients would increase the risk of LTBI, and about 20% children contacts had a positive T-SPOT.TB result in Shanghai. Children with LTBI could contribute to the pool of individuals with LTBI from which future active TB cases will arise. Chemical prophylaxis for people with LTBI is recommended by WHO to end TB

occurrence. This study aimed to assess the acceptability and feasibility of chemoprophylaxis for schoolchildren and adolescents with LTBI in Shanghai, China.

**Methods & Materials:** Seven Focus Group Discussions (FGDs) were conducted in three districts in Shanghai among August and October, 2015. Forty-two participants including 15 TB contacts and 27 health care providers (either were TB program officials or general practitioners from CDCs and community health-centers) were invited. The Data about TB management, children TB-screening and acceptability of chemoprophylaxis for children with LTBI were collected by FGDs. Nvivo 10.0 was used to identify the key issues from these interviews through coding, categorization and grouping into emergent themes.

**Results:** While many children used to reject TB-screening due to concerns of radiation and haemospasia, the screening among children TB contacts were more acceptable by parents. Poor knowledge about positive T-SPOT.TB results and chemoprophylaxis has made it difficult to get the permission on prophylaxis for schoolchildren and adolescents with LTBI. Health providers could understand the potential benefits about chemoprophylaxis but still thought it unfeasible by now considering the adverse drug reaction, high costs for medication, long duration and unclear effect indicators. In addition, heavy workloads and poor incentive mechanisms were not uncommon in the basic TB control management.

**Conclusion:** The connection between households, schools, communities and hospitals should be established for further surveillance of adverse drug-reaction and health education on LTBI and chemoprophylaxis need to be strengthened. The current financing and incentive mechanisms of TB control need to be improved for better performance in TB control.

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### Effects of motivational interviewing on the treatment adherence of Tuberculosis patients

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**Background:** Tuberculosis is one of the deadly diseases worldwide (Enarson, 2000). The WHO reported that one third (1/3) of the world's population is infected with TB. It is curable; however, if left untreated may be fatal. Non-adherence is one of the barriers in eliminating TB. Adherence declines due to lack of motivation of patients to complete their treatment (Pagulayan, 2008). Motivation affects self-efficacy of patients to adhere to their treatment (Treasure, 2004). Hence, modification on the attitude and behavior of patients may enhance treatment adherence (Dela Cruz, 2002). MI has been used in smoking cessation and substance abuse, however, no local literature has been found on its use for TB treatment adherence, and application in community settings. This study aims to evaluate the effects of a nurse delivered MI as adjunct to standard health education to enhance treatment adherence of Tuberculosis patients in the health center.

**Methods & Materials:** The study utilized a true experiment, pre-post test design. Thirty Filipino newly diagnosed patients receiving treatment in the health center were randomly assigned to control

